Amendments to the Specification:

Please add the following new paragraph on page 4, after line 22, as follows:

Figure 7 shows a plan view (Figure 7a), side elevations (Figures 7b and 7c) of an alternative embodiment of the invention.

Please replace the paragraph on page 4, line 23 through page 5, line 3, with the following amended paragraph:

Referring to Figures 1-4 and Figure 7 of the drawings, the apparatus (10) for mixing and maintaining particulates in liquid suspension includes a reservoir (20) (shown in Figure 2) for holding a fluid sample containing dispersed particles. The reservoir (20) is rectangular in cross-section, having an open top, side walls (21a, 21b), end walls (22a, 22b), and a base (23). The reservoir (20) is sized to accommodate the substantially horizontally-disposed mixing plate (30) such that there is free vertical movement of the mixing plate within the reservoir (20). Connected vertically to the centre of each end wall (22a, 22b) of the reservoir (20) are linear guide rails (24), each of the linear guide rail mechanisms being supplied with points for holding the outer casing (40) in registry with the reservoir for guiding the outer casing up and down in relation to the reservoir (20).

Please replace the paragraph on page 5, lines 5-19, with the following amended paragraph:

The reservoir shown in Figure 2 includes a horizontally disposed bracket (25) extending from one side wall (21b). In one preferred embodiment of the apparatus (Figure 2), a piston (26) is disposed vertically in the horizontally disposed bracket (25). The piston (26) may be positively located to the outer casing by means of a dome-headed locking nut connected to the exposed thread of the piston, in which case retraction of the piston serves to draw the outer casing down over the reservoir in a vertical movement. In the alternative, the piston is not positively connected to the outer casing, in which case, the casing is lowered by gravitational force. In this embodiment of the invention, the piston is actuated so as to raise and lower the outer casing (40) and mixing plate (30) components of the apparatus by means of an air supply. Control of the air supply to actuate the mixing plate is made possible by well-known means. The control of the stroke on the mixing plate is by an electrical timer pulsing a solenoid valve to open at predetermined intervals. The air is throttled to alter the severity of the stroke before outputting to the piston.

Please replace the paragraph on page 5, line 21 through page 6, line 2, with the following amended paragraph:

In an alternative embodiment ~~(not shown)~~ shown in Figure 7, the mixing plate is raised and lowered by means of a toothed drive wheel (51) into which is set an eccentric

peg (52) which engages a slot (53) in the outer casing (40) of the apparatus. The drive wheel is driven through a gear train contained within a detachable housing (54) located on one of the outer side walls (21a or 21b) of the reservoir. In this embodiment, the horizontally disposed bracket (25) and piston (26) are not present. The gear train is driven by means of a drive shaft connected to an electric servo drive motor which is located remote from the apparatus. The servo drive motor may be contained in an enclosure housing a servo drive unit and programmable logic controller controlled by means of an operator interface, so that the mixing plate of the apparatus may be raised and lowered at a predetermined rate which is related to the level of fluid contained in the reservoir.